RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/552,028
Source:	IFWP.
Date Processed by STIC:	09/25/2006
•	

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 09/25/2006
PATENT APPLICATION: US/10/552,028 TIME: 10:32:51

Input Set : A:\PTO.RJ.txt

```
5 <110> APPLICANT: De Roux, Nicolas
             Genin, Emmanuelle
      6
      7
             Milgrom, Edwin
     8
              Chaussain, Jean-Louis
     Q
              Carel, Jean-Claude
     11 <120> TITLE OF INVENTION: GPR54 RECEPTOR AGONIST AND ANTAGONIST USEFUL FOR THE
TREATMENT OF
    12
              GONADOTROPIN RELATED DISEASES
     14 <130> FILE REFERENCE: 20990EP
     16 <140> CURRENT APPLICATION NUMBER: 10/552,028
     17 <141> CURRENT FILING DATE: 2005-10-02
     19 <150> PRIOR APPLICATION NUMBER: PCT/EP04/004132
     20 <151> PRIOR FILING DATE: 2004-04-02
     22 <150> PRIOR APPLICATION NUMBER: EP 03290831.1
     23 <151> PRIOR FILING DATE: 2003-04-02
    25 <160> NUMBER OF SEQ ID NOS: 3
    27 <210> SEQ ID NO: 1
    28 <211> LENGTH: 1197
     29 <212> TYPE: DNA
    30 <213> ORGANISM: Homo sapiens
    32 <220> FEATURE:
    33 <221> NAME/KEY: CDS
    34 <222> LOCATION: (1)..(1197)
    36 <220> FEATURE:
    37 <221> NAME/KEY: gene
    38 <222> LOCATION: (1)..(1197)
    39 <223> OTHER INFORMATION: GPR54 gene
    43 <400> SEQUENCE: 1
    44 atg cac acc gtg gct acg tcc gga ccc aac gcg tcc tgg ggg gca ccg
                                                                               48
    45 Met His Thr Val Ala Thr Ser Gly Pro Asn Ala Ser Trp Gly Ala Pro
    48 gcc aac gcc tcc ggc tgc ccg ggc tgt ggc gcc aac gcc tcg gac ggc
                                                                               96
    49 Ala Asn Ala Ser Gly Cys Pro Gly Cys Gly Ala Asn Ala Ser Asp Gly
                    20
                                        25
    52 cca gtc cct tcg ccg cgg gcc gtg gac gcc tgg ctc gtg ccg ctc ttc
                                                                              144
    53 Pro Val Pro Ser Pro Arg Ala Val Asp Ala Trp Leu Val Pro Leu Phe
                                    40
    56 ttc gcg gcg ctg atg ctg ctg ggc ctg gtg ggg aac tcg ctg gtc atc
                                                                              192
    57 Phe Ala Ala Leu Met Leu Leu Gly Leu Val Gly Asn Ser Leu Val Ile
                                55
    60 tac gtc atc tgc cgc cac aag ccg atg cgg acc gtg acc aac ttc tac
                                                                              240
    61 Tyr Val Ile Cys Arg His Lys Pro Met Arg Thr Val Thr Asn Phe Tyr
                            70
                                                75
                                                                     80
    64 atc gcc aac ctg gcg gcc acg gac gtg acc ttc ctc ctg tgc tgc gtc
                                                                              288
```

Input Set : A:\PTO.RJ.txt

65 Ile Ala Asn Leu Ala Ala Thr Asp Val Thr Phe Leu Leu Cys Cys Val 66 85 90 95	al
	226
68 ccc ttc acg gcc ctg ctg tac ccg ctg ccc ggc tgg gtg ctg ggc g	
69 Pro Phe Thr Ala Leu Leu Tyr Pro Leu Pro Gly Trp Val Leu Gly A	sp
70 100 105 110	
72 ttc atg tgc aag ttc gtc aac tac atc cag cag gtc tcg gtg cag g	cc 384
73 Phe Met Cys Lys Phe Val Asn Tyr Ile Gln Gln Val Ser Val Gln A	la
74 115 120 125	
76 acg tgt gcc act ctg acc gcc atg agt gtg gac cgc tgg tac gtg a	cq 432
77 Thr Cys Ala Thr Leu Thr Ala Met Ser Val Asp Arg Trp Tyr Val T	
78 130 135 140	
80 gtg ttc ccg ttg cgc gcc ctg cac cgc cgc acg ccc cgc ctg gcg c	ta 480
81 Val Phe Pro Leu Arg Ala Leu His Arg Arg Thr Pro Arg Leu Ala L	
	60
84 gct gtc agc ctc agc atc tgg gta ggc tct gcg gcg gtg tct gcg c	
85 Ala Val Ser Leu Ser Ile Trp Val Gly Ser Ala Ala Val Ser Ala P	ro
86 165 170 175	
88 gtg ctc gcc ctg cac cgc ctg tca ccc ggg ccg cgc gcc tac tgc a	gt 576
89 Val Leu Ala Leu His Arg Leu Ser Pro Gly Pro Arg Ala Tyr Cys S	_
90 180 185 190	
92 gag gcc ttc ccc agc cgc gcc ctg gag cgc gcc ttc gca ctg tac a	ac 62 4
93 Glu Ala Phe Pro Ser Arg Ala Leu Glu Arg Ala Phe Ala Leu Tyr A	
	211
94 195 200 205	
96 ctg ctg gcg ctg tac ctg ctg ccg ctg ctc gcc acc tgc gcc tgc t	
97 Leu Leu Ala Leu Tyr Leu Leu Pro Leu Leu Ala Thr Cys Ala Cys T	yr
98 210 215 220	
100 gcg gcc atg ctg cgc cac ctg ggc cgg gtc gcc gtg cgc ccc gcg	ccc 720
101 Ala Ala Met Leu Arg His Leu Gly Arg Val Ala Val Arg Pro Ala	Pro
102 225 230 235	240
104 gcc gat agc gcc ctg cag ggg cag gtg ctg gca gag cgc gca ggc	gcc 768
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly	
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 2 106 245 250 255	Ala
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 2 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc	Ala ttc 816
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu	Ala ttc 816
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gcc gtg gtc ctg gtg g	Ala ttc 816 Phe
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctc 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg	Ala ttc 816 Phe ctg 864
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 ytg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 1 250 270	Ala ttc 816 Phe ctg 864
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 ytg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275	Ala ttc 816 Phe ctg 864 Leu
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 ytg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 1 250 270	Ala ttc 816 Phe ctg 864 Leu
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 ytg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275	Ala ttc 816 Phe ctg 864 Leu ctt 912
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcg gcc gtg gtc ctg ctc 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg ggc tcc tgg cac cca cca cgc agc tac gcc gcc tac gcg 265 ccc gcc tac gcg ggc tcc tac gcg agc tac gcc tac gcg agc tac gcc 270	Ala ttc 816 Phe ctg 864 Leu ctt 912
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcg gcc gtg gtc ctg ctc 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg ggc ccc tgg ctg gcc cca cca cca cca cca cca cca cca cc	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcg gcc gtg gtc ctg ctc 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg ggc ccc tgg ctg ccc acc cca cgc agc tac gcc gcc tac gcg 117 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala 118 290 295 300 120 aag acc tgg gct cac tgg atg tcc tac gcg atg tcc tac agc acc ctg atg acc ctg ctg atg atg ctc acc atg ctg atg atg atg atg ctc atg atg atg atg atg atg ctg atg atg atg atg atg atg atg atg atg a	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcg gcc gtg gtc ctg 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg ggc ccc tgg ctg ct	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcg gcc gtg gtc ctg ctc 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctc 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 260 265 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 270 112 gcc gcc tgc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 280 285 114 275 280 285 116 ggc ccc gcg ggc tcc tgg cac cca cca cgc agc tac gcc gcc tac gcg 285 116 ggc ccc gcg ggc tcc tgg cac cca cca cgc agc tac gcc gcc tac gcg 295 117 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala 290 120 aag acc tgg gct cac tgc atg tcc tac agc aac tcc gcg ctg aac 295 120 aag acc tgg gct cac tgc atg tcc tac agc aac tcc gcg ctg aac 295 122 305 310	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gtc ctg ctc 250 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg cac cca cca cgc agc tac gcc gcc tac gcg 117 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala 118 290 295 300 120 aag acc tgg gct cac tgc atg tcc tac agc aac tcc gcg ctg aac 121 Lys Thr Trp Ala His Cys Met Ser Tyr Ser Asn Ser Ala Leu Asn 122 305 310 315 124 ctg ctc tac ctg ctc tac gcc ttc ctg ggc tcg cac ttc cgg cac ttc cgg cac ttc cgg cac ttc ctg ggc tcg cac ttc cgg cac ttc ctg cac ttc ctg ggc tcg cac ttc cga cac ttc cgc cac ttc cgc	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320 cgc 1008
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gcc gtg gtc ctg ctc 250 255 108 gtg cgg gcc aag gtc tcg cgg ctg gtg gtc ctg ctc 250 255 109 Val Arg Ala Lys Val Ser Arg Leu Val Ala Ala Val Val Leu Leu 110 260 265 270 112 gcc gcc tgc tgg ggc ccc atc cag ctg ttc ctg gtg ctg cag gcg 113 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala 114 275 280 285 116 ggc ccc gcg ggc tcc tgg cac cca cca cgc agc tac gcc gcc tac gcg 117 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala 118 290 295 300 120 aag acc tgg gct cac tgc atg tcc tac agc aac tcc gcg ctg aac 121 Lys Thr Trp Ala His Cys Met Ser Tyr Ser Asn Ser Ala Leu Asn 122 305 310 315 124 ctg ctc tac gcc ttc ctg ggc tcg cac ttc ctg gcc ttc ctg gcc ttc ctg cac ttc ctg gcc ttc ctg cac cac cac cac cac cac cac cac cac ca	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320 cgc 1008
105 Ala Asp Ser Ala Leu Gln Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 255 108 gtg cgg gtg gtg gtg gtg gtg gtc ctg ctg ctc c	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320 cgc 1008 Arg
105 Ala Asp Ser Ala Leu Gln Gly Gln Val Leu Ala Glu Arg Ala Gly 106	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320 cgc 1008 Arg gga 1056
105 Ala Asp Ser Ala Leu Gln Gln Val Leu Ala Glu Arg Ala Gly 106 245 250 255 255 108 gtg cgg gtg gtg gtg gtg gtg gtc ctg ctg ctc c	Ala ttc 816 Phe ctg 864 Leu ctt 912 Leu ccg 960 Pro 320 cgc 1008 Arg gga 1056

Input Set : A:\PTO.RJ.txt

130				340					345					350			
132	ccc	tcg	gac	ccc	gca	gcc	cca	cac	gcg	gag	ctg	ctc	cgc	ctg	ggg	tcc	1104
133	Pro	Ser	Asp	Pro	Ala	Ala	Pro	His	Ala	Glu	Leu	Leu	Arg	Leu	Gly	Ser	
134			355					360					365				
							gcg										1152
137	His	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Lys	Pro	Gly	Ser	Ser	Gly	Leu	Ala	
138		370					375					380					
140	gcg	cgc	ggg	ctg	tgc	gtc	ctg	ggg	gag	gac	aac	gcc	cct	ctc	tga		1197
141	Ala	Arg	Gly	Leu	Cys	Val	Leu	Gly	Glu	Asp	Asn	Ala	Pro	Leu			
142	385					390					395						
145	<210)> SI	EQ II	ON C	: 2												
146	<21	L> LI	ENGTI	H: 39	98												
147	<212	2> T	PE:	PRT													
148	3 <213> ORGANISM: Homo sapiens																
150	0 <400> SEQUENCE: 2 2 Met His Thr Val Ala Thr Ser Gly Pro Asn Ala Ser Trp Gly Ala Pro																
152	Met	His	Thr	Val	Ala	Thr	Ser	Gly	Pro	Asn	Ala	Ser	Trp	Gly	Ala	Pro	
153	1				5					10					15		
156	Ala	Asn	Ala	Ser	Gly	Cys	Pro	Gly	Cys	Gly	Ala	Asn	Ala	Ser	Asp	Gly	
157				20					25					30			
160	Pro	Val	Pro	Ser	Pro	Arg	Ala	Val	Asp	Ala	Trp	Leu	Val	Pro	Leu	Phe	
161			35					40					45				
164	Phe	Ala	Ala	Leu	Met	Leu	Leu	Gly	Leu	Val	Gly	Asn	Ser	Leu	Val	Ile	
165		50					55					60					
168	Tyr	Val	Ile	Cys	Arg	His	Lys	Pro	Met	Arg	Thr	Val	Thr	Asn	Phe	Tyr	
169						70					75					80	
172	Ile	Ala	Asn	Leu	Ala	Ala	Thr	Asp	Val	Thr	Phe	Leu	Leu	Cys	Cys	Val	
173					85					90					95		
	Pro	Phe	Thr	Ala	Leu	Leu	Tyr	Pro		Pro	Gly	Trp	Val	Leu	Gly	Asp	
177				100					105					110			
180	Phe	Met	Cys	Lys	Phe	Val	Asn	_	Ile	Gln	Gln	Val	Ser	Val	Gln	Ala	
181	_		115					120					125		_		
	Thr		Ala	Thr	Leu	Thr	Ala	Met	Ser	Val	Asp		\mathtt{Trp}	Tyr	Val	Thr	
185		130				_	135				_	140			_		
		Phe	Pro	Leu	Arg		Leu	His	Arg	Arg		Pro	Arg	Leu	Ala		
	145		_	_		150	_	•		_	155		_			160	
	Ala	Val	Ser	Leu		Ile	Trp	Val	Gly		Ala	Ala	Val	Ser		Pro	
193		_		_	165	_	_	_	_	170	_	_	_ ~	_	175	_	
	Val	Leu	Ala		His	Arg	Leu	Ser		Gly	Pro	Arg	Ala		Cys	Ser	
197				180	_	_		_	185	_	_ •			190	_	_	
	GIu	Ala		Pro	Ser	Arg	Ala		Glu	Arg	Ala	Phe		Leu	Tyr	Asn	
201	_	_	195	_	_	_	_	200	_	_		_,	205		_		
	Leu		Ala	Leu	Tyr	Leu	Leu	Pro	Leu	Leu	Ala		Cys	Ala	Cys	Tyr	
205		210		- .		•••	215	a 7	_			220	_	.			
		Ата	Met	ьeu	Arg		Leu	Gly	Arg	val		val	Arg	Pro	Ala		
	225		0		.	230	~ ?	~ 7		.	235	~ 7			a.	240	
	АТА	Asp	ser	АТа		GIN	Gly	GIn	val		Ala	GIu	Arg	АТа	_	Ala	
213	**- 7	•			245		_			250				.	255	71	
	vaı	arg	Ата	_	vaı	ser	Arg	ьeu		Ala	АТА	val	vaı		ьeu	rne	
217				260					265					270			

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\09252006\J552028.raw

220 Ala Ala Cys Trp Gly Pro Ile Gln Leu Phe Leu Val Leu Gln Ala Leu 221 275 280 224 Gly Pro Ala Gly Ser Trp His Pro Arg Ser Tyr Ala Ala Tyr Ala Leu 295 228 Lys Thr Trp Ala His Cys Met Ser Tyr Ser Asn Ser Ala Leu Asn Pro 229 305 310 315 232 Leu Leu Tyr Ala Phe Leu Gly Ser His Phe Arg Gln Ala Phe Arg Arg 325 330 236 Val Cys Pro Cys Ala Pro Arg Arg Pro Arg Pro Arg Pro Gly 237 . 340 345 240 Pro Ser Asp Pro Ala Ala Pro His Ala Glu Leu Leu Arg Leu Gly Ser 355 360 244 His Pro Ala Pro Ala Arg Ala Gln Lys Pro Gly Ser Ser Gly Leu Ala 375 248 Ala Arg Gly Leu Cys Val Leu Gly Glu Asp Asn Ala Pro Leu 390 249 385 252 <210> SEQ ID NO: 3 253 <211> LENGTH: 398 254 <212> TYPE: PRT 255 <213> ORGANISM: Homo sapiens 257 <400> SEQUENCE: 3 259 Met His Thr Val Ala Thr Ser Gly Pro Asn Ala Ser Trp Gly Ala Pro 10 263 Ala Asn Ala Ser Gly Cys Pro Gly Cys Gly Ala Asn Ala Ser Asp Gly 267 Pro Val Pro Ser Pro Arg Ala Val Asp Ala Trp Leu Val Pro Leu Phe 40 271 Phe Ala Ala Leu Met Leu Leu Gly Leu Val Gly Asn Ser Leu Val Ile 275 Tyr Val Ile Cys Arg His Lys Pro Met Arg Thr Val Thr Asn Phe Tyr 70 75 279 Ile Ala Asn Leu Ala Ala Thr Asp Val Thr Phe Leu Leu Cys Cys Val 283 Pro Phe Thr Ala Leu Leu Tyr Pro Leu Pro Gly Trp Val Leu Gly Asp . 100 105 287 Phe Met Cys Lys Phe Val Asn Tyr Ile Gln Gln Val Ser Val Gln Ala 115 120 125 291 Thr Cys Ala Thr Leu Thr Ala Met Ser Val Asp Arg Trp Tyr Val Thr 135 295 Val Phe Pro Leu Arg Ala Leu His Arg Arg Thr Pro Arg Leu Ala Leu 150 155 299 Ala Val Ser Leu Ser Ile Trp Val Gly Ser Ala Ala Val Ser Ala Pro 170 303 Val Leu Ala Leu His Arg Leu Ser Pro Gly Pro Arg Ala Tyr Cys Ser 180 185 307 Glu Ala Phe Pro Ser Arg Ala Leu Glu Arg Ala Phe Ala Leu Tyr Asn 200 311 Leu Leu Ala Leu Tyr Leu Leu Pro Leu Leu Ala Thr Cys Ala Cys Tyr 312 210 215 220

Input Set : A:\PTO.RJ.txt

	Ala 225	Ala	Met	Leu	Arg	His 230	Leu	Gly	Arg	Val	Ala 235	Val	Arg	Pro	Ala	Pro 240
		Asp	Ser	Ala	Leu 245		Gly	Gln	Val	Leu 250		Glu	Arg	Ala	Gly 255	
323 324		Arg	Ala	Lys 260	Val	Ser	Arg	Leu	Val 265	Ala	Ala	Val	Val	Leu 270	Leu	Phe
327 328	Ala	Ala	Cys 275	Trp	Gly	Pro	Ile	Gln 280	Leu	Phe	Leu	Val	Leu 285	Gln	Ala	Leu
331 332	Gly	Pro 290	Ala	Gly	Ser	Trp	His 295	Pro	Arg	Ser	Tyr	Ala 300	Ala	Tyr	Ala	Leu
	Lys 305	Thr	Trp	Ala	His	Cys 310	Met	Ser	Tyr	Ser	Asn 315	Ser	Ala	Leu	Asn	Pro 320
339 340	Leu	Leu	Tyr	Ala	Phe 325	Leu	Gly	Ser	His	Phe	Arg	Gln	Ala	Phe	Arg 335	Arg
343 344		Cys	Pro	Cys 340	Ala	Pro	Arg	Arg	Pro 345	Arg	Arg	Pro	Arg	Arg 350	Pro	Gly
347 348	Pro	Ser	Asp 355	Pro	Ala	Ala	Pro	His 360	Ala	Glu	Leu	His	Arg 365	Leu	Gly	Ser
351 352	His	Pro 370	Ala	Pro	Ala	Arg	Ala 375	Gln	Lys	Pro	Gly	Ser 380	Ser	Gly	Leu	Ala
	Ala 385	Arg	Gly	Leu	.Cys	Val 390	Leu	Gly	Glu	Asp	Asn 395	Ala	Pro	Leu		

VERIFICATION SUMMARY

DATE: 09/25/2006

PATENT APPLICATION: US/10/552,028

TIME: 10:32:52

Input Set : A:\PTO.RJ.txt